

Notice of Allowability

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 July 2008 has been entered.

Status of the Claims

This action is in response to papers filed 7 July 2008 in which claims 21-24 and 27 were amended and a Declaration under 37 C.F.R. § 1.132 was submitted.

The amendments and Declaration have been thoroughly reviewed and the amendments have been entered. This action is further in response to claim amendments discussed and agreed upon during an interview between the examiner and Mr. Feltham on 7 October 2008.

The previous rejections in the Office Action dated 24 April 2004 are withdrawn in view Applicant's arguments presented in the response. All rejections being withdrawn, the pending claims are in condition for allowance.

Claims 21-24 and 27 are in condition for allowance.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with S. Neil Feltham on 7 October 2008.

The application has been amended as follows:

Cancel Claims 1-20.

Amend Claim 23, line 3 to delete "substantially".

Amend the title to read: CARBON NANOTUBE-NUCLEIC ACID COMPLEXES

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The claims are drawn to dispersed complexes consisting of an unfunctionalized carbon nanotube non-covalently bound to single stranded nucleic acid molecule.

The closest prior art of Yerushalmioren (cited in the previous office action) teaches unfunctionalized carbon nanotubes dispersed using water-soluble hydrophilic polymers. Yerushalmioren teaches that the polymers are selected from polysaccharides and polypeptides and exemplifies a polysaccharide i.e. gum arabic (GA) (page 6, lines 4-18). The reference does not suggest nucleic acid polymers and

given the results obtained using GA, one of ordinary skill would not look for alternative polymers for forming dispersed nanotube complexes.

Buzaneva (cited in the previous office action) teaches DNA molecules that are denatured and mixed with carbon nanotubes spontaneously self-assemble into chaotic ball structures (Abstract, page 43, right column). The chaotic structure obtained by Buzaneva would not suggest that nucleic acid polymers would be useful in the nanotube-polymer dispersion of Yerushalmioren.

It is the opinion of the examiner that the prior art does not teach, suggest or make obvious the instantly claimed complexes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 21-24 and 27 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (571) 272-0741. The examiner can normally be reached on 6:00 TO 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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